# EXHIBIT 2

**Exhibit 2: Topics for Advertiser Plaintiffs–Meta Concurrent Proceeding**

The following are the respective positions of Advertiser Plaintiffs' experts (Dr. Williams, Mr. Kreitzman, Prof. Gans, and Mr. Fasser) and Meta Platforms, Inc.'s experts (Prof. Tucker and Prof. Hochberg) on the agreed upon areas of disagreement for the concurrent proceeding to be held on December 5, 2023, to the extent an expert has analyzed those topics.

1. **The experts disagree about whether the Kreitzman-Williams proposed methodology is capable of demonstrating using evidence common to the class that all or nearly all proposed class members were harmed as a result of the alleged monopoly maintenance conduct.**

**ADVERTISER PLAINTIFF EXPERTS' POSITION**

[Mr. Kreitzman and Dr. Williams]

The Kreitzman-Williams methodology does not assume common impact or a common percentage overcharge. Using common evidence, the positive overcharge found when applying the methodology is an empirical finding—not an assumption. Nearly all of Meta Ads' revenues were generated in ad auctions and Meta's auction mechanism was applied consistently to essentially all ads and advertisers during the Class Period (0.004% of advertisers purchased only "Reach and Frequency" ads, themselves based on auctions). Meta committed to a *common* auction mechanism that determines the winning ad's price. Dr. Tucker speculates that some advertisers may have avoided paying overcharges because of differences in reserve prices, ad inventories, or quality scores. For this to be true, Meta would have had to increase reserve prices, reduce ad inventories, or adjust quality scores (relative to the but-for world) *for some advertisers but not others*. The record contains no evidence that Meta did so. The methodology can also be applied by year, which yields positive overcharges in each year in the Class Period. Together, these findings show that all or nearly all Class members paid positive overcharges.

For discounts to eliminate injury, they must be substantially larger than discounts in the but-for world. Dr. Tucker offers no evidence that this was the case, and economic theory predicts the opposite.

**TUCKER'S POSITION**

The methodology cannot show that nearly all proposed class members were harmed by higher prices—indeed, it does not analyze prices. This does not change regardless of how the ads were purchased or how many ads were discounted. The methodology assumes all proposed class members were injured and estimates the same percentage overcharge for all advertisers, based on a purported measurement of excess profit. However, profits tell us nothing about whether monopoly maintenance led to all advertisers paying higher prices. Even if average prices were higher, which Plaintiffs have not shown, it is not the case that every advertiser pays higher prices. Further, the approach fails to control for the many reasons besides the challenged conduct that explain profitability, including lower costs and better products. The methodology also generates the same injury regardless of which conduct is found illegal. Suppose only the Netflix agreement were found illegal. The methodology implies that this conduct alone allowed Meta to maintain a monopoly and increase prices uniformly by 25% for all advertisers in all years—the

same overcharge and impact if all forms of conduct were illegal. This is obviously incorrect. Any methodology theorizing that overcharges led to injury must determine how the alleged conduct affected prices paid by advertisers, which this methodology does not.

2. **The experts disagree about whether, under the Plaintiffs' theories, some potential class members derived theoretical benefits from the challenged conduct, distinct from price changes.**

**ADVERTISER PLAINTIFF EXPERTS' POSITION**

[Professor Gans]

The Plaintiffs' main theory is that the conduct illegally allowed Meta unique access to data for better matches between users and advertisers, raising data-targeting entry barriers. The point of disagreement is where the benefits from better matching manifested themselves. My position is that advertisers care about the effectiveness of campaigns and whether there is targeting or not. Improved matching would reduce the total number of impressions required to achieve that effectiveness, but the value of each impression would be correspondingly higher. Therefore, any increases in efficiencies from improved matching flow through Meta, rather than advertisers who can potentially optimise the allocation of impressions more efficiently. Whether those efficiencies are passed on to advertisers depends upon how these allocative changes are reflected in Meta's total price to advertisers. This implies that changes in price rather than some independent assessment of advertiser value are all that is needed to assess harm from the conduct. In addition, diminishing returns to data indicate that there may be limited efficiency gains to Meta—if any—compared to new entrants who do not have access to the large stock of data as Meta does. Dr. Tucker fails to provide any clear explanation of how matching would benefit advertisers directly let alone differentially when Meta sets total price.

**TUCKER'S POSITION**

The experts agree there are benefits to potential class members from the challenged conduct but disagree whether these benefits must be accounted for in the injury analysis. Plaintiffs allege the challenged conduct led to Meta obtaining additional data which improved ad targeting. This benefited advertisers by lowering performance-adjusted prices and by reducing the number of advertisers competing in the auction for the opportunity to show an ad – lowering nominal prices. These benefits must be analyzed on an individualized basis because they depend on types of data used by the advertiser and the advertiser's objectives. Gans's conclusion that these benefits would flow to Meta, rather than advertisers, assumes there is only one firm in the market. However, Williams argues multiple firms are in the market, so Gans's reasoning is inapplicable. Gans also suggests analyzing price changes to assess whether these benefits flowed to advertisers. But Williams's methodology does not analyze price changes, instead inferring a change in price from profits, and therefore does not perform the analysis Gans argues is needed. Gans's theory also implies that any price effects resulting from these benefits would require individualized measurement, something Williams does not attempt to do. Gans also fails to address other benefits to advertisers from the alleged conduct, like the introduction of Stories Ads.

3. **The experts disagree about whether an economic profits-based methodology can be used to determine injury and damages from the alleged monopoly maintenance conduct.**

**ADVERTISER PLAINTIFF EXPERTS' POSITION**

[Mr. Kreitzman and Dr. Williams]

Dr. Hochberg's claim is directly contracted by:

- *US Airways v. Sabre* (two Nobel Prize-winning experts for the plaintiff conducted a damages analysis that compared the EPR of Sabre (alleged to have violated Sections 1 and 2) to the Yardstick index EPR).

- *Google Play Store Antitrust Litigation* (we conducted a damages analysis that compared the EPR of Google Play (alleged to have violated Section 2) to the Yardstick index).

ABA's monograph *Proving Antitrust Damages: Legal and Economic Issues*: "The yardstick employed must be comparable to the industry and firm in question." The methodology does not require that comparable firms necessarily have the same or even similar degrees of "product improvement." We specified criteria that identified firms with comparable industry and firm characteristics to Meta. The Yardstick index reflects an EPR (higher than 97.7% of firms) that would be earned through innovation, quality improvement, etc., but for the alleged conduct. Damages are the excess of Meta's EPR over the Yardstick index.

Dr. Tucker claims the alleged conduct led to significant innovation and quality improvement for Facebook. Her claim contradicts economic theory and Facebook's own data. More competition in the but-for world would lead to more innovation and quality improvement. Facebook's own data shows that Facebook's product quality did not improve in the Class Period.

**HOCHBERG'S POSITION**

The Kreitzman-Williams methodology does not distinguish between profits earned due to anticompetitive conduct as opposed to innovation, product quality, or better managerial practices. Moreover, the Kreitzman-Williams yardstick study does not provide any way to determine whether the yardstick firms are appropriate benchmarks for such legitimate profits or what portion, if any, of the difference between Meta's profit rate and the profit rate of yardstick firms can be attributed to profits earned through anticompetitive conduct. Thus, the Kreitzman-Williams methodology does not follow *Proving Antitrust Damages*, which requires a party to "disaggregate the effects of the violation from other, lawful causes of plaintiffs' harm." (p.98). This is because in the presence of innovation, economic profits can exist and persist and are zero only in hypothetical, stylized, "perfect" competition. The amount of economic profits that arise from innovation are a function of the innovations, not the money spent to create them. The Kreitzman-Williams yardstick methodology cannot control for these differences. Furthermore, the Kreitzman-Williams method uses accounting data to calculate "economic profits," even though the economics literature has long held that one cannot use accounting data to reliably measure economic profits. Thus, whether economic profits are informative about monopoly

power is beside the point because Kreitzman and Williams are not measuring economic profits to begin with.

4. **The experts disagree about whether accounting data can be used to measure economic profits.**

**ADVERTISER PLAINTIFF EXPERTS' POSITION**

[Mr. Kreitzman and Dr. Williams]

Dr. Hochberg relies on four papers: Fisher and McGowan (1983), Salamon (1985), Brief and Lawson (1991), Danielson and Press (2003). These papers correctly note differences between accounting rates of return and internal rates of return, both of which differ fundamentally from EPRs. None of these four papers support her claim because none of them mention—much less analyze—EPRs.

Dr. Hochberg's claim is directly contradicted by Institutional Shareholder Services, Inc. ("ISS") and Koller et al. (2020), *Valuation: Measuring and Managing the Value of Companies*, building on the Nobel Prize-winning work of Modigliani and Miller (1958) and (1961) and hundreds of peer-reviewed articles published since. "This book—now in its seventh edition—has sold more than 800,000 copies; it is used…at top business schools such as Wharton School, University of Chicago, MIT, INSEAD, Tuck School of Business, and Northwestern University." https://www.mckinsey.com/our-people/tim-koller.

Koller et al. contains an entire chapter titled "Reorganizing the Financial Statements" that discusses in detail how to use accounting data to calculate EPRs.

Using publicly available information, ISS calculates economic profits for over 21,000 public companies, and their analyses are relied on by "approximately 3,400 clients include[ing] many of the world's leading institutional investors . . . as well as public companies. . . ."

**HOCHBERG'S POSITION**

Accounting data does not reflect information about potentially important sources of economic value for companies, such as reputation, technical know-how, management practices, and employee human capital. Generally, such intangibles are particularly important for technology companies such as Meta and its yardsticks.

Forty years ago, Fisher and McGowan (1983), in a paper published in the economics profession's flagship American Economic Review, showed that accounting profit rates such as the Kreitzman-Williams EPR are generally different than true economic profit rates. For example, they show that under various circumstances, companies with the highest accounting profit rates may even have the lowest economic profit rates. Therefore, differences in the EPR values calculated by Kreitzman between Meta and purported yardsticks cannot be shown to accurately reflect differences in underlying economic profit rates. None of the purported adjustments to financial statements made by Kreitzman in his calculations address this fundamental problem and Plaintiffs do not point to any other methods that would do so.

It does not appear that Kreitzman and Williams dispute that accounting data does not accurately measure economic profits. Despite this, they insist on referring to their calculation as a calculation of economic profits, even though it is not.

5. **The experts disagree about whether the Kreitzman-Williams methodology for selecting yardstick firms can provide a reliable benchmark with which to determine Meta's alleged excess profit rate.**

**ADVERTISER PLAINTIFF EXPERTS' POSITION**

[Mr. Kreitzman and Dr. Williams]

Our six objective, credible criteria, *when taken together*, identify the most appropriate yardstick firms, and correctly exclude the companies mentioned by Dr. Hochberg. This method is widely accepted and applied in literature and in practice.

LinkedIn, Pinterest, Reddit, Snapchat, TikTok, and/or Twitter were adversely affected by Meta's alleged conduct and including them would overestimate damages. LinkedIn, Reddit, and TikTok did not have relevant financial data publicly available. Pinterest, Snapchat, and Twitter had negative income for most years in the Class Period.

Apple and Amazon did not derive most of their revenue from online advertising. Moreover, Mr. Kreitzman added Apple and Amazon and found that the Yardstick index would have decreased from 28.7% to 21.6%, thus increasing damages.

Dr. Hochberg speculates that WP does not satisfy Criterion 6, but she fails to provide any evidence from the Class Period. Indeed, WP's annual reports for 2016-2020 characterize all its sales as "advertising."

If the alleged conduct resulted in an increase in Google's market power (and therefore its EPR), my damages analysis is valid and conservative.

Weibo's high EPR does not render it incomparable. There will always be yardstick firms with the highest and the lowest ERPs, and the purpose is to use all relevant data from all comparators to provide the most reliable estimate.

**HOCHBERG'S POSITION**

The Kreitzman-Williams methodology for selecting yardstick firms consists of arbitrary steps that result in three yardsticks (Google, Weibo, and Wirtualna Polska) that do not provide a reliable benchmark for the profit rate Meta would have earned in absence of its alleged anticompetitive conduct.

The Kreitzman-Williams steps for selecting yardsticks, which consist of filtering by purported industry, arbitrary thresholds of revenue, market capitalization, and purported revenue share of advertising, provide no assurance of identifying comparable firms in a comparable market unaffected by the alleged violation. Kreitzman and Williams fail to articulate, either in their reports or in their depositions, any reason to believe that their filters are relevant. Instead, many

were explicitly chosen "to draw the line somewhere"[1] or to avoid "complex calculation[s]."[2] They filter out firms like Twitter, LinkedIn, Snapchat, Apple, or Amazon, but include (i) Wirtualna Polska, a relatively small Polish firm, (ii) Google, which Plaintiffs allege was a co-conspirator in Meta's alleged anticompetitive conduct, and (iii) Weibo, which had a higher EPR than Meta. The arbitrary and unjustified nature of the screening criteria and the fact that Kreitzman's screens yielded such a group of companies as the "most comparable firms" confirms the methodological failings of his model.

6. **The experts disagree about whether all ads Meta sold to proposed class members during the class period reflect the product sold in the Plaintiffs' alleged relevant product market.**

**ADVERTISER PLAINTIFF EXPERTS' POSITION**

[Dr. Williams]

I defined the relevant product market, i.e., social advertising, using two different methodologies: the *Horizontal Merger Guidelines* and *Brown Shoe*. Dr. Tucker fails to understand this basic fact. She falsely asserts that I defined the relevant product market based on particular "ad units" and "ad practices" and whether a given "ad venue" used certain "targeting options." Dr. Tucker is wrong. She has conjured up her own strawman version of my market definition analysis—a version that bears no relationship to the analysis performed in my Opening Report.

I provided a description of certain aspects of social advertising based on several sources (Opening Report, ¶¶ 17-21). Dr. Tucker interprets those paragraphs alone as somehow providing the basis for my definition of the antitrust product market relevant for analyzing Plaintiffs' claims. Dr. Tucker is wrong. Moreover, Sections II.B, II.C, and II.D of my Opening Report contain descriptions of further aspects of social advertising, which Dr. Tucker ignores.

Dr. Tucker's report does not mention the *Horizontal Merger Guidelines*, much less discuss or rebut my actual market definition analysis utilizing the methodology set forth in the *Guidelines*. Dr. Tucker mentions *Brown Shoe* in passing, but fails to discuss or rebut my market definition analysis utilizing the methodology set forth in *Brown Shoe*.

**TUCKER'S POSITION**

To establish common proof of injury, all proposed class members must have purchased the product sold in the candidate market. Using Plaintiffs' description that "social advertising is advertising that can be targeted based on social data contained a social graph,"[3] the evidence suggests that few class members purchased ads targeted based on social connections. For example, during the class period, only 1.0% of spending on Facebook used "friends of connections targeting," whereby advertisers can target or exclude friends of individuals

[1] Kreitzman Depo. Tr. at 121:11-16.
[2] Kreitzman Depo. Tr. at 136:19-137:3.
[3] Advertiser Plaintiffs' Notice of Motion, Motion for Class Certification, and Memorandum in Support, *Maximilian Klein, et al., v. Meta Platforms, Inc.*, p. 4.

connected to their Facebook page, apps, or events. This percentage is smaller for Instagram, Audience Network, and Messenger.

As a result, a substantial proportion of the class could not have been injured because they did not purchase the product that is the subject of these allegations. Williams does not engage with this. And neither the hypothetical monopolist test nor *Brown Shoe* analyses are designed to tell us whether class members bought the product in the candidate market.

**7. The experts disagree regarding Dr. Hochberg's calculation of Mr. Kreitzman's "economic profit rate" measure for 1478 firms.**

**<u>ADVERTISER PLAINTIFF EXPERTS' POSITION</u>**

[Mr. Kreitzman]

Dr. Hochberg wrongly claims she conducted an empirical analysis "generally follow[ing]" what she calls "Mr. Kreitzman's methodology" for estimating EPRs. I did not use "my" methodology—I used the widely accepted methodology described by, for example, ISS and Koller et al. Dr. Hochberg did not follow this methodology. Koller et al.: "To prepare the financial statements for analyzing economic performance, you should reorganize each financial statement into three categories: operating items, nonoperating items, and sources of financing." ISS and Koller et al. explain the required reorganizations of firms' financial statements can vary by industry, business model, and accounts used in preparing those financial statements.

Dr. Hochberg naively and inappropriately applied adjustments that were specific only to the accounts and business model of Meta and the Yardstick firms to all firms in her sample. For example, eight of Hochberg's top twenty firms ranked by EPR are in the Homebuilding industry. This red flag should have alerted her of a systematic error. By naively using the adjustments from my analysis of EPRs for the Yardstick firms and Meta Ads, Dr. Hochberg overstated by *18 times* the EPRs of firms in the Homebuilding industry. Her specific error was to treat inventory (homes constructed but not yet sold) as excess cash rather than an operating asset.

**<u>HOCHBERG'S POSITION</u>**

In my Report, I replicated Kreitzman's methodology, as he stated it in his initial report, for a broad set of firms. This analysis shows substantial variation in the "economic profit rate" within industries and highlights the unreliability of the Kreitzman-Williams method for identifying profits earned through anticompetitive conduct.

It appears that Kreitzman's position is that his initial methodology is inapplicable to a subset of these firms. His adjustment to this subset of firms does not change the overall conclusion. Furthermore, Kreitzman's position that his methodology cannot be generalized is at odds with the ISS data relied on by Williams, as ISS uses a general method to calculate their profitability metric (which is somewhat akin to the Kreitzman-Williams EPR) for all firms. Notably, Kreitzman's calculations deviate even from the methodologies proposed by the authorities cited by Kreitzman and Williams themselves, such as the Koller et al (2020) textbook or the ISS, demonstrating the arbitrary nature of Kreitzman's calculations.